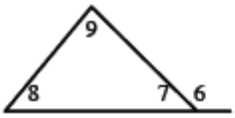
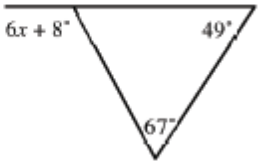
Triangles



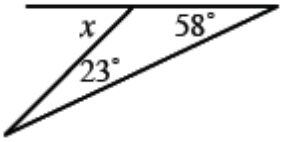
- $m\angle 7 + m\angle 8 + m\angle 9 = 180^\circ$
- $m\angle 6 = m\angle 8 + m\angle 9$
  (exterior angle = sum remote interior angles)

Example 1

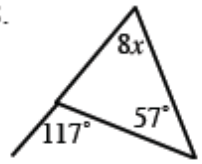


Solve for x.
Use the Exterior Angle Theorem: $6x + 8^\circ = 49^\circ + 67^\circ$
$6x^\circ = 108^\circ \Rightarrow x = \frac{108^\circ}{6} \Rightarrow x = 18^\circ$

17.



18.



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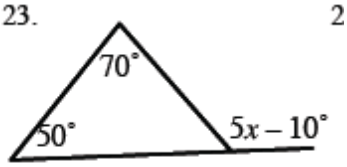
23.



2

Answers

1.	45°	2.	35°	3.	40°	4.	34°	5.	12.5°	6.	15°
7.	15°	8.	25°	9.	20°	10.	5°	11.	3°	12.	$10\frac{2}{3}^\circ$
13.	7°	14.	2°	15.	7°	16.	25°	17.	81°	18.	7.5°
19.	9°	20.	7.5°	21.	7°	22.	15.6°	23.	26°	24.	2°
25.	40°	26.	65°	27.	$7\frac{1}{6}^\circ$	28.	10°				